

IN THE CLAIMS:

Please amend claims as follows.

1. (currently amended) Method for the species-specific and quantitative detection of central nervous system (CNS) [[CNS]] tissue in meat and meat products,

Characterised by comprising the steps

a) ~~Preparation~~ preparing of the sample material and RNA extraction

b) ~~Reverse Transcription~~ reverse transcribing of the RNA ~~[[in]]~~ into cDNA

c) ~~Analysis~~ analyzing of the cDNA of the glial fibrillary acidic protein (GFAP) ~~[[GFAP]]~~ gene in real-time PCR, wherein the real-time PCR is carried out with a pair of primers selected from the group comprising

a first pair of primers, namely

SEQ ID NO 1: Primer RTGcowM56F2a 5'-ACC TGC GAC CTG GAG TCC T-3'

and

SEQ ID NO. 2: Primer RTGcowM56R2a 5'-CTC GCG CAT CTG CCG-3',

a second pair of primer, namely

SEQ ID NO. 4: Primer RTGpigM56F2 5'-GAC CTG CGA CGT GGA GTC CC-3'

SEQ ID NO. 5: Primer RTGpigM56R2 5'-TGG CGC TCC TCC TGC TCC -3',

and pairs of primers comprising a forward and a reverse primer having a sequence identity of at least 40% to said first or said second pair of primers;

and wherein the real-time PCR is carried out using a TagMan_{mgb} sensor spanning the boundary between exon 5 and exon 6 of the GFAP gene.

2. canceled
3. (currently amended) Method according to claim 1 characterised by comprising the fact that the preparation of the sample material occurs by homogenization ~~homogenisation~~, preferably by a combination of vertical rotation movements and horizontal up-and-down movements.
4. (currently amended) Method according to claim 1 characterised by comprising the fact that the RNA extraction occurs by means of lysis and extraction on phenol basis so that RNA is also extracted from matrices with a particularly high concentration of fatty acids.
5. (currently amended) Method according to claim 1 characterised by comprising the fact that the real-time PCR is carried out for bovine, ovine and caprine animals with SEQ ID NO. 3

Primer RTGcowM56F2a ~~5'-ACC TGC GAC CTG GAG TCC T-3'~~

Primer RTGcowM56R2a ~~5'-CTC GCG CAT CTG CCG-3'~~

TaqMan_{mgb} sensor OptiR6-FAM-ACT CGT TCG TGC CGC GC-MGB.

6. (currently amended) Method according to claim 5 characterised by comprising the fact that Primer RTGcowM56F2a or Primer RTGcowM56R2a is used with the TaqMan_{mgb} sensor OptiR.

7. (currently amended) Method according to claim 1 characterised by comprising the fact that real-time PCR is carried out for porcine animals with the following primer primers:

SEQ ID No. 6

Primer RTGpigM56F2 5' GAC CTG CGA CGT GGA GTC CC 3'

Primer RTGpigM56R2 5' TGG CGC TCC TCC TGC TCC 3'

TaqMan_{mgb} sensor OptiR 6-FAM-ACT CGT TCG TGC CGC GC-MGB.

8. (currently amended) Method according to claim 7 characterised by comprising the fact that Primer RTG RTGpigM56F2 or Primer RTG pigM56R2 is used with the TaqMan_{mgb} sensor OptiR.

9. (currently amended) Method according to claim 1 characterised by comprising the fact that it is carried out in heat-treated meat and meat products.

10. (currently amended) ~~Utilization of the method according to claim 1, for the species-specific and quantitative detection of CNS tissue in meat and meat products~~ A

method of species specific and quantitative detection of CNS tissue in meat and meat products using the method of claim 1.

11. (currently amended) Test kit for the species-specific and quantitative detection of central nervous system (CNS) [[CNS]] tissue in meat and meat products, containing, at least, material for the species-specific and quantitative analysis of the GFAP cDNA, comprising the fact that the material for real time-PCR of the extracted GFAP mRNA for the detection of bovine, ovine and caprine animals are Universal PCR Master, MgCl₂, SEQ ID No. 1: Primer RTGcowM56F2a 5'-ACC TGC GAC CTG GAG TCC T-3', SEQ ID No. 2: Primer RTGcowM56R2a 5'-CTC GCG CAT CTG CCG-3' and SEQ ID No. 3: TaqMan_{mgb} sensor OptiR 6-FAM-ACT CGT TCG TGC CGC GC-MGB and/or comprising the fact that the material for real time-PCR of the extracted GFAP mRNA for the detection of porcine animals are Universal PCR Master, MgCl₂, SEQ ID No. 4: Primer RTGpigM56F2 5'-GAC CTG CGA CGT GGA GTC CC-3', SEQ ID No. 5: Primer RTGpigM56R2 5'-TGG CGC TCC TCC TGC TCC -3' and SEQ ID No. 6: TaqMan_{mgb} sensor OptiR 6-FAM-ACT CGT TCG TGC CGC GC-MGB.

12. (currently amended) Test kit for the species-specific and quantitative detection of CNS tissue in meat and meat products according to claim 11, containing material for RNA extraction as well as suitable reaction buffers and/or material for the reverse transcription of the extracted GFAP mRNA.

13. (currently amended) Test kit for the species-specific and quantitative detection of CNS tissue in meat and meat products according to claim ~~[[12]]~~ 11, characterised by the fact that the material for the reverse transcription of the extraction of mRNA ~~RNA-extraction~~ are RNase-free water, Reverse Transcriptase (RT) buffers, $MgCl_2$, 2'-Deoxyribonucleoside-5'-triphosphate (dNTP), random hexamers, RNase inhibitor and reverse transcriptase.

14. (currently amended) Test kit for the species-specific and quantitative detection of CNS tissue in meat and meat products according to claim 11, characterised ~~by~~ comprising the fact that a transcription control is contained in the form of a GFAP mRNA for the supervision of a successful transcription process of the isolated GFAP mRNA into cDNA.

15. canceled

16. canceled

17. (currently amended) Test kit for the species-specific and quantitative detection of CNS tissue in meat and meat products according to claim 11, characterised ~~by~~ comprising the fact that it contains a positive control in the form of the GFAP cDNA of bovine and/or porcine animals and a negative control in the form of the GFAP

cDNA of bovine and/or porcine animals, an internal amplification control as well as reference samples for the quantification of the examined test samples.

18. (currently amended) Test kit for the species-specific and quantitative detection of CNS tissue in meat and meat products according to claim 11, characterised by comprising the fact that the reference samples are dilution series, samples with defined CNS content and/or a reference gene.
19. (new) The method according to claim 1, wherein the sequence identity is one of at least 60 %, more than 80 %, and more than 90 %